

## REMARKS

This Amendment responds to the final Office Action mailed June 20, 2006 and is being enclosed with a Request for Continued Examination submitted concurrently herewith. This Amendment represents a submission fully responsive to the June 20, 2006 Office Action mailed on April 21, 2005, as required under 37 CFR § 1.114. Claims 20-27 are pending. Claims 20 and 25-27 have been amended. In view of the foregoing amendments, as well as the following remarks, Applicants respectfully submit that this application is in complete condition for allowance and request reconsideration of the application in this regard.

Claims 20-27 stand rejected under 35 U.S.C. § 102(e) as anticipated by Hu et al. (U.S. Patent No. 6,413,802), hereinafter *Hu*. Of the rejected claims, claims 20 and 25 are the only independent claims. The Office Action contends that *Hu* shows or teaches all the elements of the rejected claims. Applicants respectfully traverse this contention.

Independent claim 20 sets forth an SOI island comprising “a surface periphery with a surface facing toward the handle wafer” and “the gate electrode extending entirely around the surface periphery of the SOI island such that a portion of the gate electrode is between the surface of the SOI island and the handle wafer.” *Hu* fails to disclose or suggest at least this feature of Applicants’ independent claim 20.

Specifically, *Hu* discloses that the gate (20) extends about three sides of the SOI island (14), as best visible in Figure 2D. The surface of the SOI island (14) facing toward the handle wafer (10) contacts the BOX (12). However, *Hu* fails to disclose that any portion of the gate (20) is disposed between the surface of the SOI island (14) facing toward the handle wafer (10) and the handle wafer (10). If a reference fails to disclose even one of the claimed elements, the reference does not and cannot anticipate the claimed invention. *Hu* fails to teach a gate electrode that extends entirely around a surface periphery of an SOI island such that a portion of the gate electrode is between a handle wafer and a surface of the SOI island facing toward the handle

wafer. Consequently, Applicants respectfully request that the Examiner withdraw the rejection.

Moreover, *Hu* fails to provide a suggestion or rationale for the gate (20) to extend entirely around the surface periphery of the SOI island (14). Specifically, *Hu* discloses at column 3, lines 27-29 that the SOI layer is on a BOX layer (12). *Hu* further discloses at column 3, lines 64-67 that the etch process forming the SOI island (14) from the SOI layer stops “on the insulator layer 12.” As a result, the bottom surface of the SOI island (14) in *Hu* must contact the BOX (12). It follows that a person having ordinary skill in the art, given the disclosure of *Hu*, would not recognize that the fabrication process disclosed in *Hu* could be modified to permit any portion of the gate (20) to be disposed between the bottom surface of the SOI island (14) and the BOX layer (12).

Because claims 21-24 depend from independent claim 20, Applicants submit that these claims are also patentable for at least the same reasons as claim 20. Furthermore, these claims each recite a unique combination of elements not disclosed or suggested by *Hu*.

Independent claim 25 is patentable for at least the same or similar reasons as independent claim 20. Because claims 26 and 27 depend from independent claim 20, Applicants submit that these claims are also patentable for at least the same reasons as claim 20. Furthermore, these claims each recite a unique combination of elements not disclosed or suggested by *Hu*.

## **Conclusion**

Applicants have made a bona fide effort to respond to each and every requirement set forth in the Office Action. In view of the foregoing amendments and remarks, this application is submitted to be in complete condition for allowance and, accordingly, a timely notice of allowance to this effect is earnestly solicited. In the event that any issues remain outstanding, the Examiner is invited to contact the undersigned to expedite issuance of this application.

Applicants do not believe fees are dues in connection with filing this communication, other than a fee under 37 CFR 1.17(e) for filing the Request for Continued Examination. If, however, any fees are necessary as a result of this communication, the Commissioner is hereby authorized to charge any under-payment or fees associated with this communication or credit any over-payment to Deposit Account No. 23-3000.

Respectfully submitted,

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Date

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